

TEACHING RESEARCH: THE EXPERIENCE IN THE COLLECTIVE HEALTH MASTER PROGRAM.AT THE UNIVERSITY OF ANTIOQUIA, COLOMBIA

María Mercedes Arias V¹

María Victoria López L²

Díva Estela Jaramillo V³

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The idea that one learns to do research only by taking methodological courses is false, as it is false the idea that one learns how to do research only through investigative practice. We consider both strategies pertinent and necessary and that is the reason we believe graduated courses based on investigation must contemplate both. This study aims to share with the academic community the concept, the intention, the context, and how the Seminar on Lines of Research in the Collective Health Master's Program at the University of Antioquia, Colombia has been developed. This study emphasizes the development and the results of such experience in the education of researchers, describes its onset, the curriculum structure and the relationship with the research groups, the transformation of students and the professor's role.

DESCRIPTORS: education, higher; public health

FORMACIÓN DE INVESTIGADORES: LA EXPERIENCIA DE LA MAESTRÍA EN SALUD COLECTIVA DE LA UNIVERSIDAD DE ANTIOQUIA, COLOMBIA

Una falsa disyuntiva se centra en si se aprende a investigar con cursos de investigación o, si se aprende haciendo investigación. Creemos que ambas estrategias son pertinentes y necesarias, razón por la cual consideramos que, la pos-graduación fundamentada en la investigación debe incidir pedagógicamente en ambas. El objetivo de este artículo es compartir con la comunidad académica la concepción, la intención, el contexto y la forma como se viene desarrollando el Seminario de Línea de Investigación, en la Maestría en Salud Colectiva de la Universidad de Antioquia, Colombia. Este artículo enfatiza el desarrollo y los resultados de esta experiencia en la formación de investigadores, presentando el surgimiento, la estructura del plan de estudios en general, su relación con los grupos de investigación, los cambios observados en los alumnos y el rol de profesor.

DESCRIPTORES: educación superior; salud pública

FORMAÇÃO DE PESQUISADORES: A EXPERIÊNCIA NO MESTRADO EM SAÚDE COLECTIVA DA UNIVERSIDADE DE ANTIOQUIA, COLÔMBIA

É falsa a idéia de que, o ensino da investigação se dá exclusivamente nas matérias de metodologia ou que só se aprende a fazer pesquisa com a prática investigativa. Acreditamos que as duas estratégias são pertinentes e necessárias, razão pela qual consideramos que os cursos de pós-graduação fundamentados na investigação devem incidir pedagogicamente sobre ambas. O objetivo deste artigo é socializar com a comunidade acadêmica a concepção, a pretensão, o contexto, a forma como vem sendo desenvolvido o Seminário de Linha de Pesquisa, no Mestrado em Saúde Coletiva da Universidade de Antioquia, Colômbia. O presente documento enfatiza especialmente o desenvolvimento e os resultados desta experiência na formação de pesquisadores, apresentando o surgimento, a estrutura do currículo em geral e a relação com os grupos de pesquisa, as transformações nos alunos e o papel do professor.

DESCRIPTORES: educação superior; saúde pública

¹ RN, PhD in Sciences, Public Health, Professor, M.Sc in Collective Health, e-mail: mariamav@tone.udea.edu.co; ² Sociologist, Professor, M.Sc. in Collective Health, e-mail: mvlopez@catios.udea.edu.co; ³ RN, Magister in Salud Pública, Professor M.Sc. in Collective Health, e-mail: divajara@catios.udea.edu.co. University of Antioquia College of Nursing

INTRODUCTION

Training researchers is the primary goal of graduate course system, which is why master's and doctoral programs are guided by research. In research training, both knowledge acquisition and its application to research are necessary in order to increasingly master the scientific methodology⁽¹⁾. Scientific research is important in the transformation of professional practice, in which knowledge gap turn into challenges that prioritize research activities, with a view to attending to the political and ethical commitment to knowledge production and appropriation⁽²⁾. In this article, we reflect on the experience of research line seminars in the Master's Program in Collective Health at the University of Antioquia School of Nursing, during the ten years of its functioning, emphasizing how it has contributed to research training, to transformations in the organization of academic work and to theoretical, methodological and pedagogical achievements.

The Master's Program in Collective Health was created in 1992, as a result of a discussion process about the need for explanatory paradigms that confront traditional conceptions on health and report on the relations between health and political and social conjunctures. The creation of the program revealed the need to understand the social and economic processes affecting society's health. Serious problems were evident in the country's health conditions, large failures in coverage and administrative inefficiency in service delivery.

The creation of this program is part of a broader movement in Latin America, with important developments in Brazil, Mexico and Ecuador, where different authors have addressed the collective health concept, considered as a social, political, academic and research practice that is constituted in "a movement at the level of knowledge production that reformulates the basic inquiries that allowed for the emergence of the biologicistic paradigm and tries to define an object of study that reports on the relations between the biological, the psychological and the social"⁽³⁾.

THE CONTEXT OF THE MASTER'S PROGRAM IN COLLECTIVE HEALTH

Through its graduate programs, the University of Antioquia intends to be a means of

interaction between the academy and society. The aim is for students finishing the Master's Program in Collective Health to be able to interpret the health-disease problems of groups, in the context of social priorities, and to participate, with a critical and propositive attitude, in the construction of proposals to improve living and health conditions and human development.

In this sense, one of its fundamental goals is to contribute to the training of researchers in order to obtain a solid preparation in research, a commitment to society, profound knowledge about the health problems and ability to contribute with alternative solutions in complex social situations in the health area.

The Master's program departs from the research advances made at the School of Nursing in the 1980's and manages to join researchers to shape an academic group that is concerned with problems and common objectives in health.

The program's curriculum structure is based on two axes: research and social sciences. As suggested above, the research training is guided by research methodology seminars, research line seminars and research tools from the areas of demography, epidemiology and statistics. The social sciences are complemented with seminars on health promotion and health service management. These two central axes cross the curriculum, until terminating the research work as a requisite to obtain the Master's Degree in Collective Health.

In order to organize research activities, research groups and lines exist. The groups follow the guidelines by the National Science and Technology System⁽⁴⁾, are considered as the basic units of research activity and are consolidated as protagonists of scientific activity. In the research groups, as a priority, faculty and students are stimulated and supported to formulate specific projects as the basic units of development of the research lines⁽⁵⁾.

The research lines have a very general theme that points towards a sufficiently wide and not fully characterized problem area. The work developed on the basis of research lines can contribute to the recognition, reading and rereading of social processes in their complexity, to think about research in broad problem areas that require interdisciplinary approaches and, thus, to advance in the construction of explanatory and comprehensive frameworks. Furthermore, this work favors the visibility and range

of the research and stimulates the socialization and creation of information exchange, consultation, cooperation and inter-institutional support networks.

THE RESEARCH LINE SEMINARS, THEIR DYNAMICS AND RELATION WITH THE RESEARCH GROUPS

The research line seminars are the curricular practice of researchers' and students' joint work on the problem area the research group studies. These seminars are part of the Master's Program's research axis and occur in parallel and articulated with the research methodology seminars. In the latter, students get familiar with epistemological principles; empirical-analytic and qualitative research foci and the methods, techniques and procedures pertinent to each. The conception of the line seminars responds to the concern with innovating active pedagogies in order to educate the inquisitive I⁽⁶⁾, as the center of graduate – master's and doctoral – programs' concerns.

According to the above, the line seminars are one of the training components of the master's program. Students have contact with natural and social science paradigms and with methods that entail possibilities and limitations to report on socially pertinent phenomena. They also dialogue with faculty from different subject areas, graduates and renowned authors on the themes, employees and colleagues, benefiting a broad theoretical discussion in which new relevant research problems emerge. Given their complexity, the participation of different subject areas is needed, as well as the use of diverse theoretical and methodological approaches and everyone's creativity in order to achieve new readings of reality and solutions that lead to social transformations. Students recover knowledge from their basic training and adds knowledge from other areas the group has been consolidating over time to study its research problem.

It should be highlighted that there is a permanently ongoing reflection about the methods, their premises, range and limitations and about the procedures, instruments and ways of investigating a problem and facilitating its understanding, with a view to learning how to theorize, which implies "constructing, expanding and understanding theory"⁽⁷⁾. As they are tools, methods and procedures neither appear as a truth nor as a goal in themselves, but as a means to favor the apprehension of reality.

The complex themes, problems and questions of collective health are the most important and, therefore, exceed the methods and procedures. These problems refer to vital processes that transcend the unidisciplinary perspective and they cannot be studied in a fragmented way. Likewise, the collective health perspective acknowledges objective, subjective and intersubjective dimensions and not only intends to get to know and diagnose the reality of the complex processes that rest between health-disease-death, but also to stimulate and create conditions that contribute to their transformation. Hence, this requires the elaboration of proposals that do not remain limited to the description of problems, or to the application of theoretical frameworks, but also move beyond by explaining the multiple forms this reality takes.

INTERACTION WITH THE RESEARCH GROUPS

The interactions between the master's program and the research groups has brought gains for both, as the groups support research at master's level which, in turn, dynamizes their development and consolidation. The groups' work is considered as a way of organizing the academic work, through which knowledge is constructed on guiding problems. The aim is to find empiric evidence and put it at the service of theory and vice-versa; it is of fundamental interest to clarify the relation between theory and practice and to find ways to contribute to the construction of social knowledge, of use to other researchers and to the public in general, which is meaningful to the actors the problem emerged from, seeking new meanings for the study objects.

A wide range of problems appears in the groups' development. As mentioned above, the systematic and persistent research work around these gives rise to the research lines. It is in this context that the line seminar turns into a laboratory for theoretical construction, integration, research and action.

Master's students' entry into the groups constitutes a strength and its work transcends the development of the academic program. Having contact with the experiences, problems, with real actors and with the research groups allows students to select and construct a project and receive qualified accompaniment to favor their learning of their role as researchers.

At different times in the project, the students are followed by a promoter who advises and assesses the work they develop. In turn, students and promoters actively participate in the research group's permanent work. In expanded seminar sessions, advances and theoretical discussions are exchanged and participants have contact with collective problems and methodological tools, that is, the learning of research is consolidated.

Although the collective health problem goes beyond the possibilities of research groups' work, they attempt to look at the large collective health problems. In parallel, on the basis of the research work, new problems emerge, which offer students a wide range of possibilities to select the theme that is most suitable to their theoretical, professional and personal expectations in the framework of the groups' intentions. These can be independent studies, but also part of larger projects or joint studies with researchers from other groups, universities or countries. In determining what problems the students will address, the pertinence of the theme, the focus and coherence with the outlines of the Master's Program in Collective Health are considered, as well as the demands posed by the social and health context and the possibilities for follow-up by faculty members-researchers.

The research lines attempt to construct and deconstruct the **objects of study**, so as to combine distinct approaches, theories and methods in order to construct explanatory frameworks for specific problems⁽⁸⁾. In the academic sphere, the research lines are a key instrument to get to know reality, as it is not enough to develop knowledge about its fragments as isolated spheres, but there is a need to integrate knowledge and approaches in the ontological, the epistemological and in praxis.

TRANSFORMATIONS IN THE STUDENT

The students' training constitutes a two-way challenge that mobilizes individuals and groups; on the one hand, there is the movement from professional to researcher and, on the other, the step from the objectives of the work to those of knowledge and transformation; from a culture of oral or graphic communication-information to a culture of written communication and academic interlocution that allows the student to acquire the knowledge and progressively master a specific knowledge area.

The changes to move from professional to researcher have to be understood not as the denial of the professional condition, but, on the opposite, as the expansion of explanatory frameworks and professional work. In this field, very important ontological and epistemological changes are produced, by increasingly complex questions and the outlining of ways to understand and transform the study objects. This supposes a metamorphosis of the professionals' condition, to the extent that they reconsider their practice, contributes to the subject area and obtains interdisciplinary training.

Beyond the learning of research techniques, the challenge of teaching is to activate the ability to think. "In advanced methodology courses, the students often make up for the sophisticated handling of tools as a way of facing reality in an intelligent way. In this perspective, knowledge is not something given, but something constructed; it is not only a product, but a process in which reality is considered, recreated and reconstructed creatively"⁽⁹⁾.

In this sense, besides teaching the steps of the research process (theme, problem, theoretical framework, methods, results), in the line seminars, attempts are made to integrate this process and construct thinking, through the formulation of questions, the design of ways to read and think about reality, to relate knowing and thinking, examining and teaching.

The study means passing from practical to theoretical problems, from opinion arguments to academic arguments, from convincing about ideas to sustaining theories. Therefore, the students give up their prescriptive role and move on to a comprehensive one, from a culture of factual, immediate and short or medium-term answers to a culture of problematizing and long-range questions and answers.

Student training attempts to achieve transformations through the practice of reflexivity, self-organization and ethics.

Reflexivity is considered in terms of the new experiences and self-knowledge and social self-production practices. It is part of an emerging paradigm in the field of epistemology and constitutes an alternative to linear or simple models of analysis and intervention in society. This practice promotes reconsidering the task, looking at and being looked at through the study objects and receiving interventions from theoretical authors and from reality

itself. In this sense, "knowing is an act in which the world enters and is conceived; knowing is configured in an act of interiority and, in turn, the internal world opens up and detaches from its concentration, moves on from being internal and gets integrates with the external whole"⁽¹⁰⁾.

Self-organization is part of the specificity of what is alive. Live organisms are autopoietic, in the sense of self-organized systems and, to this extent, when a system is no longer of use, another more sophisticated and creative system is constructed⁽¹¹⁾. The master's program promotes the students' ability to self-organize and be autonomous and, to this extent, adopt their commitment to the production and expansion of the body of knowledge in collective health.

In ethical training, the aim is for students to advance in the reflection on the ethics-knowledge pair, with a view to integral research training. The master's program favors the advancement and takes up three levels, which are: the first is the morals of indignation, which leads to sympathy for people who suffer; the second is the reflexive level of ethics, it is the strategy of postponing the own good to fit in the other's right, whether at individual or collective level, which imprints a normative character; and the third level is moral relativism, or the absence of an absolute criterion and the existence of different moral judgment criteria each culture transmits. This third level can exist through the hesitant and progressive construction of dialogue among different sociocultural systems. According to the author, the only goal that can be allowed for in this search for a common denominator of morals is, therefore, the suppression of suffering and the search for happiness⁽¹²⁾.

The changes the program intends to favor in the students demands solid training from the faculty members, in academic as well as research terms, and pedagogical skills to support what they teach and what they do.

This requires that the students get through the crises of insufficiency in their education to cope with the debates, papers and essays, in line with academic demands and the pressure exerted by their institutions to deal with the responsibilities at work and understand and overcome their family members' incomprehension. Besides, they need to have a good dose of humility and allow their colleagues to practice the academic dialogue, which is part of the base of their training.

THE RANGE OF RESEARCH GROUP WORK

The research groups aim for and reach important objectives, which are:

- To strengthen solid and stable academic relations with researchers from related areas;
- To contribute to the construction of research networks that offer the possibility of growth and contribute to the construction of a communication culture;
- To contribute to the growth of the academic unit's programs;
- To contribute to the integration between teaching and research;
- To strengthen undergraduate education. The research line seminars are considered as open spaces, which undergraduate students from different schools at the university increasingly link up with. This affiliation fits into the conception of learning to research by researching, which makes students value and be enthusiastic about research. To the extent that undergraduate faculty members participate in the research groups, this allows research to move on to teaching at both undergraduate and graduate level.

RESEARCH GROUPS, MASTER'S PROGRAM IN COLLECTIVE HEALTH

As mentioned, the research groups and lines articulate around broad themes. At this moment, the following four groups participate in the Master's Program in Collective Health:

"Social policies and health services", aims to deepen the critical analysis of theories and methodological proposals that explain and contribute to the improvement of social policies and health services. Nowadays, the group includes the following research lines: living conditions, health services, mortality and demographic anthropology.

"Nursing practice in the social context", aims to obtain knowledge about the theoretical and epistemological referents and the practices related to nursing care as the object of study, management and intervention in the validity and foundations contributed by different nursing care proposals or models. This group develops the following research lines: good nursing practice, nursing care models, sociology of the profession, informal patient caregivers and culture and care in health and nursing.

"Women's health", which investigates the sociocultural dimension of the main women's health problems, intends to construct theory and work methodologies and to develop proposals that transform their living and health conditions.

"Health promotion", which aims to position health promotion as a transdisciplinary, multisectoral and inter-institutional field of knowledge and social practice. For this field, the group has defined a qualitative emphasis in its research projects, with the final aim of turning learning operational by constructing effective methodologies for social and health interventions.

CONCLUSION

In conclusion, the research line seminars that emerged through the creation of the Master's

Program in Collective Health are conceived as an alternative for research teaching and favor the students' transformation from professionals to researchers. The achievements are observed in the students, in the master's program and in knowledge. The students acquire a learning that allows them to take part in national and international events, compete for funding and publish under the advice of their tutors and the follow-up of research group members.

The master's program's actual efficacy is to move on with the graduate research, decrease dropout and keep up high graduation rates. The achievements in knowledge are materialized in the increased number of publications that grant visibility to the groups' work, the rising quantity and quality of projects, the training of faculty members as researchers and the consolidation of research.

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